

Route Concept Report

Prepared for:

Route 227

Located in:

San Luis Obispo County

Caltrans, District 5

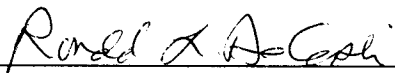
Advanced System Planning

July 1999

District 5
Advanced System Planning
San Luis Obispo

I approve this Route Concept Report as the guide toward which today's decisions and/or recommendations should be directed.


Recommend Approval:


RONALD L. DECARLI
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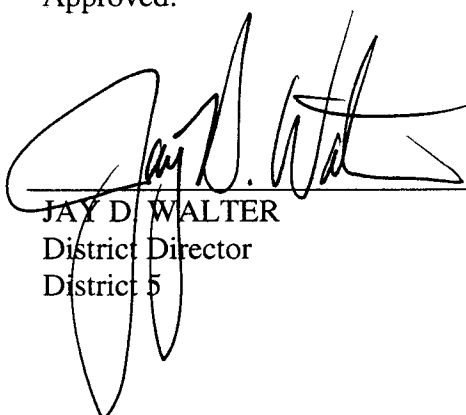

JAY D. WALTER
District Director
District 5
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Introduction

This Route Concept Report (RCR) is a planning document that describes the Department's approach to future development of Route 227. Considering reasonable financial constraints and projected travel demand over a 20-year planning period[♦], the RCR defines an appropriate type of facility to achieve the concept level of service. The goal of this effort is to provide a basis for the development of the State Transportation Improvement Program and for determination of the appropriate concept for future highway projects. The emphasis over the next twenty years will be on making more efficient use of existing facilities. Intelligent Transportation System (ITS) technologies identified in the Central Coast ITS Strategic Deployment Plan should be implemented as determined feasible.

Route Concept Summary

The San Luis Obispo County Regional Transportation Plan describes the Route 227 corridor^{♦♦} as a two to four lane conventional highway extending fourteen miles between Route 101 in Arroyo Grande, north to the City of San Luis Obispo, west along South Street to Higuera Street and, ending at the Madonna Road/Route 101 interchange. The primary purpose of the route is to serve local and commute traffic between San Luis Obispo and the Five Cities area. Price Canyon Road, Corbett Canyon Road, and Tank Farm Road contribute traffic to this route. The route is the connection for local and tourist traffic destined to the Lake Lopez recreation area. The first 1.5 miles runs through the Old Town area of Arroyo Grande on Branch Street. Between Arroyo Grande and Price Canyon Road, the route is very narrow and has 10' lanes with little or no shoulders. In addition, non-standard horizontal and vertical curves exist at many locations throughout the segment between Branch Street and Price Canyon Road.

<u>Segment</u>	<u>P. M. to P.M.</u>	<u>Concept LOS</u>	<u>Concept Improvements</u>
No. 1	0.0 to 1.49	D-35*	2 lane bypass 40' min Full I/C @ Rte. 101, relinquishment to the City of Arroyo Grande, or status quo.
No. 2	1.49 to 7.13	C-45**	2 lane facility. Include operational improvements. Improve alternate routes.
No. 3	7.13 to R9.82	C-45**	Widen to 4 lane facility w/ rt & lt turn channelization @ major intersections. Class II bike lanes & aux merge lanes as needed.
No. 4	R9.82 to R13.74	D-35*	4 lane facility to P.M. 11.27 (Industrial Way). From there, realign to new Prado Road extension.***
No. 5	R13.74 to R14.19	D-35*	No change to current alignment. Caltrans will explore relinquishment scenarios.

* D-35 LOS for Highways with controlling traffic signals with a minimum operating speed of 15-30 mph.

** Minimum operating speed of 45 mph for a two lane or multi-lane conventional highway.

*** The San Luis Obispo Council of Governments (SLOCOG) recommends no more than four lanes be included until further justification is provided. They strongly support the development of an improved parallel route system, especially between Aero Drive and Tank Farm Road (on the west side) and Capitola Way and Orcutt Road (on the east side). From south of Tank Farm Road to Price Canyon Road four lanes are recommended.

The Ultimate Transportation Corridor would be District relinquishment of the route entirely. It is the position of Caltrans that 227 is an inappropriate state highway. Improvements to the route and/or parallel facilities are intended to benefit the operation of the corridor as a whole, regardless of whether the route is a State Facility. Caltrans has no current plan or schedule for carrying out relinquishment of the route. However, Caltrans would consider realignment of Route 227 to Price Canyon Road, and relinquish the segment from Route 101, through the Village of Arroyo Grande, to the current intersection of Price Canyon Road and Route 227 as an interim measure, prior to ultimate relinquishment of the entire route.

[♦] Planning period varies slightly due to somewhat dated information received from SLOCOG's regional model.

^{♦♦} A "corridor" includes parallel systems like rail, bike paths, etc.

Route Concept Reports are prepared by District staff referring as needed to local and/or regional agency studies for support data. They will be updated as conditions change or new information is obtained.

The Route Concept Report is a preliminary planning phase document that leads to subsequent project programming and the project development process. As such, the specific nature of the projected development improvement (i.e., roadway width, number of lanes, access) in the RCR's are used for the purpose of estimating improvement costs, and may change depending upon operating conditions and design standards at the time of actual development.

Route Description

Route 227 is a fourteen mile long, two to four lane, conventional highway running between its southern intersection with Route 101 in the City of Arroyo Grande, north to the City of San Luis Obispo, west along South Street to its northern intersection with Route 101 at the Madonna Road interchange. In addition, State statutes include an unconstructed segment from Route 101 to Route 1 in Oceano. (*See Attachment B*) In 1992, a portion of Route 227 was re-designated from the intersection at Broad and South to follow South Street to the Madonna Road Intersection. Its original path followed Broad Street through downtown San Luis Obispo. Land use along Route 227 is comprised of open space, agricultural, a variety of low-density residential categories, as well as, industrial and commercial use.

Purpose of the Route

Route 227 serves local and commute traffic between San Luis Obispo and the Five Cities area. Price Canyon Road, Oak Park Road, and Corbett Canyon Road contribute traffic to this route. Portions of the route are paralleled by Route 101 and Orcutt Road. The portion of the route through the village of Arroyo Grande serves seasonal recreational traffic en route to Lopez Lake.

- Functional Classification - The two-lane portion of Route 227 from Route 101 to Printz Road in Arroyo Grande is classified as an Urban Other Principal Arterial. From Printz to Buckley Road it is classified as a Rural Minor Arterial. The two and four-lane portion from Buckley Road to the Madonna Road interchange in San Luis Obispo is classified as an Urban Other Principal Arterial.
- Route 227 is not classified as a SHELL (State Highway Extra Legal Load) or STAA (Surface Transportation Assistance Act) Route.
- The Route is eligible for Scenic Highway designation through portions of Arroyo Grande and San Luis Obispo.
- The unconstructed portion of Route 227 from Route 1 south of Oceano to Route 101 near Arroyo Grande is on the Freeway and Expressway System.
- Route 227 is not on the Interregional Road System (IRRS). Planning and funding activities for capacity improvements will be primarily the responsibility of the San Luis Obispo Council of Governments (SLOCOG).
- Route 227 is identified as an Evacuation Route in the San Luis Obispo Counties/Cities Nuclear Power Plant Emergency Response Plan (August 1994).
- Access to Route 227 is presently unrestricted since it is classified as a Conventional Highway.
- Route 227 is not part of the National Highway System (NHS).
- Route 227 provides the only ground access to the San Luis Obispo airport from the north and south.

Improvements Necessary to Achieve the Route Concept

Caltrans Transportation Planning Division should work with SLOCOG to remove the unconstructed/unadopted portion of the route from the statutes. The unconstructed portion is **not** included in Segment No. 1. The unconstructed portion runs from Route 1 south of Oceano to Route 101 near Arroyo Grande. (See Attachment B)

<u>Segment</u>	<u>P. M. to P.M.</u>	<u>Concept LOS*</u> (for def. See Attachment A)	<u>Concept Improvements</u>
No. 1	0.0 to 1.49	D-35*	2 lane bypass 40' min Full I/C @ Rte. 101, relinquishment to the City of Arroyo Grande, or status quo.
No. 2	1.49 to 7.13	C-45**	2 lane facility. Include operational improvements. Improve alternate routes.
No. 3	7.13 to R9.82	C-45**	Widen to four-lane facility w/ right & left turn channelization @ major intersections. Class II bike lanes & aux. merge lanes as needed.
No. 4	R9.82 to R13.74	D-35*	4 lane facility to P.M. 11.27 (Industrial Way). From there, realign to new Prado Road extension.***
No. 5	R13.74 to R14.19	D-35*	No change to current alignment. Caltrans will explore relinquishment scenarios.

* D-35 LOS for Highways with controlling traffic signals with a minimum operating speed of 15-30 mph.

** Minimum operating speed of 45 mph for a two lane or multi-lane conventional highway.

*** SLOCOG recommends no more than four lanes be included until further justification is provided. They strongly support the development of an improved parallel route system, especially between Aero Drive and Tank Farm Road (on the west side) and Capitolia Way and Orcutt Road (on the east side). From south of Tank Farm Road to Price Canyon Road four lanes are recommended.

It should be noted that the Concept LOS may not agree with the LOS established by the local planning agencies. In some instances, LOS may vary, depending on the traffic needs and/or financial and technical considerations.

For the purposes of the Route Concept Report a deficiency is LOS E. The Transportation System Development Program (TSDP) identifies a deficiency as LOS F. Caltrans will consider revising the future TSDP LOS standard to be consistent with the RCR with the next update of the TSDP.

Growth in South County will partially contribute to the general increase in traffic on the entire route. Growth within the city limits of San Luis Obispo, especially along the Route 227 corridor will be the main cause of LOS deterioration in Segments four and five. Annexation of areas around the airport will likely result in more intense land uses and contribute to increased traffic volumes. Based on SLOCOG's intent to delay Route 101 widening for as long as possible, Caltrans anticipates that Route 227 will become a permanent reliever system for Route 101 between the Five Cities Area and San Luis Obispo.

Alternative Route Concepts Considered But Rejected

None.

Long Range Operations Plan Coordination

The Caltrans District 5 Traffic Operations System Plan identifies candidate strategies and tools that can be used to manage traffic and maximize utilization of existing capacity on both the state highway and local street and arterial system. The intent of coordinating with the Long Range Operations Plan (LROP) is to assure that low cost operational improvements are considered in attainment of route concepts in lieu of major capital improvements.

The Conventional Highway Operations Element of the LROP includes: signal timing and coordination, passing lanes and turnouts. The LOS standards of the LROP are LOS B/C for rural areas and LOS C/D for urban areas. Such improvements shall be considered prior to major capital investments. Caltrans will work with SLOCOG towards the planning and programming of operational improvements along this corridor.

Multimodal Consideration

Although not site specific, this Route Concept supports the implementation of Transportation System Management (TSM) and Transportation Demand Management (TDM) tools. Working together, Caltrans, the San Luis Obispo Council of Governments, the County of San Luis Obispo, Cities of San Luis Obispo and Arroyo Grande should include TSM/TDM provisions in the planning process including the following:

Bus Service

San Luis Obispo City Transit serves Route 227 within the city limits. Service is available with hourly headways as far as Tank Farm Road. In addition, they are currently evaluating the feasibility of providing service to the SLO Airport. South County Area Transit provides limited transit service from Route 227 in the Village to the Route 101 interchange. However, there is no regional transit service along Route 227 between San Luis Obispo and Arroyo Grande, or along Route 227 between San Luis Obispo and Pismo Beach via Price Canyon Road. San Luis Obispo Regional Transit Authority is the agency that would determine the feasibility of such service.

Bike Lanes

From Post Mile (P. M.) 0.0 to 7.13, the shoulder width varies from 0 to 4 feet. From Post Mile 7.13 to 14.19, shoulder width varies from 0 to 8 feet. The County Bike Plan (September 1994), adopted by the San Luis Obispo County Board of Supervisors, proposes a continuous Class II bike lane from Corbett Canyon Road (P.M. 6.73) to the San Luis Obispo City Limit (P.M. R9.82). The City of San Luis Obispo has also identified Route 227 as a continuous Class II facility. Shoulder widths are generally adequate for Class II bike lanes from Price Canyon Road north through the City of San Luis Obispo. However, much of the route between its southern junction with Route 101 and Price Canyon will require shoulder improvements to accommodate Class II bikeways.

Park and Ride

There are no Park and Ride facilities immediately adjacent to, or serving, Route 227. According to District 5's Park and Ride Program Report (April, 1996) there are no potential lots identified. However, this does not preclude the possibility of a lot at some location along the route.

Rail Service

There is no rail service between the City of Arroyo Grande and the City of San Luis Obispo. The San Diegan train began serving the cities of Grover Beach and San Luis Obispo in October 1995, with a layover station in San Luis Obispo. This service does not have a significant effect on the operational characteristics of Route 227, due to the fact that the San Diegan is not used by commuters between the Five Cities area and San Luis Obispo.

Light rail

Low densities, high construction costs and environmental constraints would most likely preclude light rail from being cost effective. This assessment is consistent with the findings of the SLO Rail Improvement Feasibility Study, (Schiermeyer, '92).

HOV Consideration

As a rural conventional highway, Route 227 is not considered appropriate for HOV implementation. Additionally, according to the High Occupancy Vehicle Guidelines for Planning, Design and Operations (July, 1991), a minimum of 800 vehicles per hour per lane or 1800 persons per hour per lane should be projected to use the HOV facility during the peak hour, which is not likely on this route. Other components of successful HOV lanes include support facilities such as park and ride lots, transit facilities and public awareness campaigns.

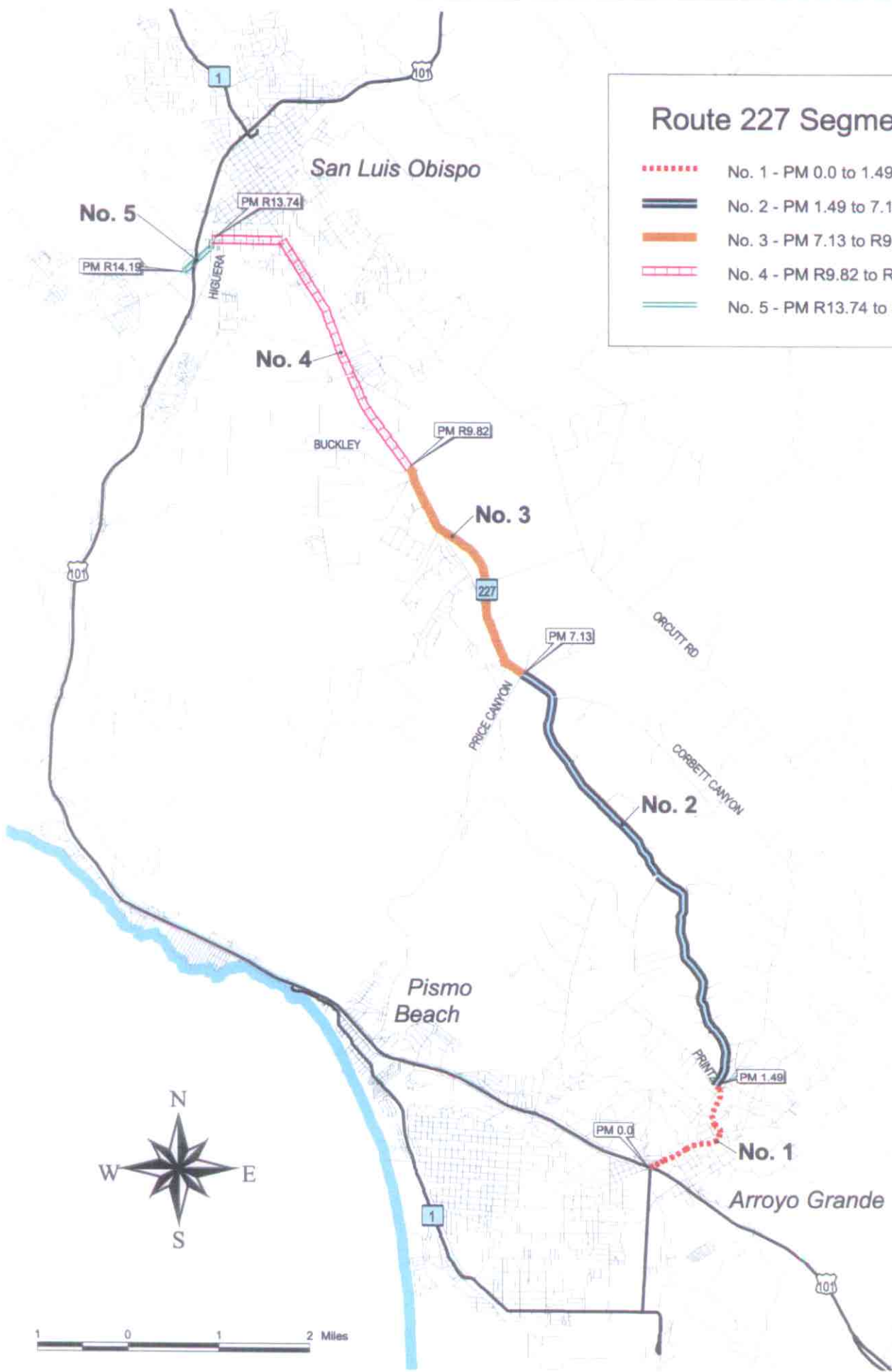
Ultimate Transportation Corridor

The ultimate transportation corridor (UTC) is viewed as the maximum development of a facility or corridor including parallel facilities. The UTC is used to identify potential right of way needs and issues. This information is critical for working with locals and regional land use planning agencies to determine right of way preservation and dedication techniques.

It is the policy of Caltrans to work with local land use authorities to identify transportation corridors and explore all appropriate means for the acquisition and preservation of those corridors. Caltrans would consider a realignment of Route 227 along Price Canyon Road, which is consistent with the SLOCOG RTP. Caltrans is also open to relinquishing the segment from Route 101 through the Village to the current intersection of Price Canyon Road. However, the Ultimate Transportation Corridor would be District relinquishment of the route entirely. It is the position of the District, that 227 is an inappropriate state highway because of the parallel Route 101. However, improvements to the route and/or parallel facilities are intended to benefit the operation of the corridor as a whole, regardless of whether the route is a State Facility.

Route 227 Segments

- No. 1 - PM 0.0 to 1.49
- No. 2 - PM 1.49 to 7.13
- No. 3 - PM 7.13 to R9.82
- No. 4 - PM R9.82 to R13.74
- No. 5 - PM R13.74 to R14.19

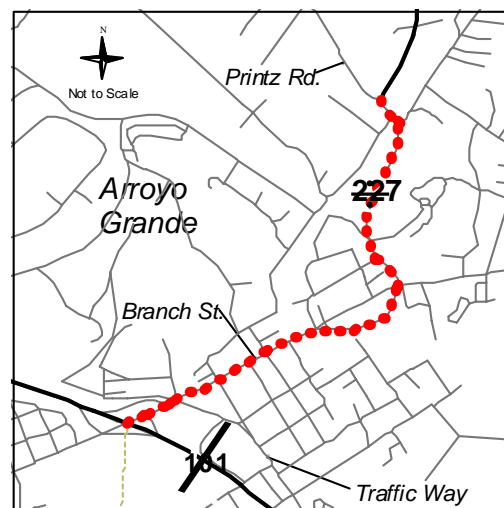


Type of Facility: Conventional Highway

Functional Classification: Urban Other Principal Arterial
National Highway System: No
No. of Lanes: 2 & 4
R/W Width: 30 m (100') **Median Width:** 0'
Lane Width: 3 – 3.6 m (10–12') **Bike Lanes:** Class III
Shoulder Width: 1 – 4.4 m (3–5') **Parking:** Yes

STATE ROUTE 227**SEGMENT #1****Post Mile:** 0.00 to 1.49**Limits:** South Jct. Rte. 101 to Printz Road**Route Concept: 2-lane Bypass of the Village of Arroyo Grande**

Discussion: The Route Concept for this segment is for the construction of a bypass of the Village and a new interchange with Route 101. This is the best alternative for improving LOS and the interchange of the revised alignment and Route 101 if a new alignment is constructed. However, the District would also consider realigning the route to Price Canyon Road and relinquishing the portion through the Village up to the current intersection with Price Canyon Road. In addition, although the area is not currently experiencing any problems, any major project should look at the Huasna Road/227 intersection to construct in a more traditional T section.

**S e g m e n t F e a t u r e s**

Parallel Facilities: Hwy. 101 from the junction of Route 227 to the City of San Luis Obispo. Price Canyon Road from Route 101 to Route 227.

Environ. Constraints: Any realignment of this segment would need to consider a full range of alternatives, founded on a strong purpose and need for the bypass. It would also need to consider the potential for impacts on the physical, cultural, socio-economic and natural environments.

Land Use: Commercial land use through the Village of Arroyo Grande and residential rural and residential suburban through the Arroyo Grande Fringe area, and agricultural land use east of the Village.

Major Traffic Generators: The Village area in Arroyo Grande is a major generator of local traffic. However, the segment of Route 227 through the Village is also the major access for recreational traffic to Lopez Lake and for a significant number of large trucks carrying field crops from the agricultural land uses east of the Village.

System Management: Current system management is in the form of traffic signal control. There are four signal systems in this segment.

Identified Deficiencies – Existing and Future:

- There is a projected lack of capacity for existing and future traffic. Potential to reach LOS F by 2010.
- The City of Arroyo Grande is in the final stages of completing an evaluation of its short and long range circulation improvement needs. One of the long range alternatives, which has been studied, is the construction of a full interchange at Route 101 and a connecting reliever route around the Village area.
- Need for Class II Bike Lanes.

Recommended Actions:

- Consider or implement Intelligent Transportation System (ITS) technologies identified in the Central Coast ITS Strategic Development Plan.
- Consult Long Range Operations Plan for ideas.
- Work with City of Arroyo Grande to implement measures to reduce congestion.
- Consider a contract Park and Ride Lot at the intersection of Branch and Mason Streets if land is available.
- Work with SLOCOG, the County and the affected Cities on potential realignment to Price Canyon Road.
- Assess improvements to the 5-way intersection at Huasna Rd. and 227.

ROUTE SEGMENT DATA

DISTRICT:	05	COUNTY:	SLO	ROUTE:	227
SEGMENT #:	1	P.M.:	0.0 to 1.49	LENGTH:	1.49

DESCRIPTION: South Jct. Rte. 101 to Printz Road

FUNCTIONAL CLASSIFICATION: Rural Principal Arterial

TYPE OF FACILITY: Conventional

TYPE OF TERRAIN: Rolling

NUMBER OF LANES: 2

LANE WIDTH: 10' to 12' **SHOULDER WIDTH:** 3' to 15'

R/W WIDTH: 100' **MEDIAN WIDTH:** 0'

ADT (PRESENT 1996): 5,300¹

ADT (FUTURE 2015): 11,500¹

PEAK HOUR VOLUME (Present): 868 (Present Design Hour)¹

DIRECTIONAL SPLIT: 55%

HOURS DELAY: Not Available

V/C RATIO: 0.53 **LOS:** D **% TRUCKS:** 14% of ADT

SIGNALIZED INTERSECTIONS: 4

3 YR. ACCIDENT RATE: 3.22² **FAT:** 0.000² **F&I:** 1.45²

STATEWIDE ACC. RATE: 2.40² **FAT:** 0.021² **F&I:** 1.09²

PROPOSED ROUTE CONCEPT (2015): 40' minimum 2-lane expressway bypass

ROUTE CONCEPT LOS (2015): D-35

ANTICIPATED LOS (2015): F-20 without any improvements
D-35 with concept improvements

¹ Data from the 1996 Route Segment Inventory.

² Data calculated from 01-01-95 through 01-01-98

Type of Facility: Conventional Highway

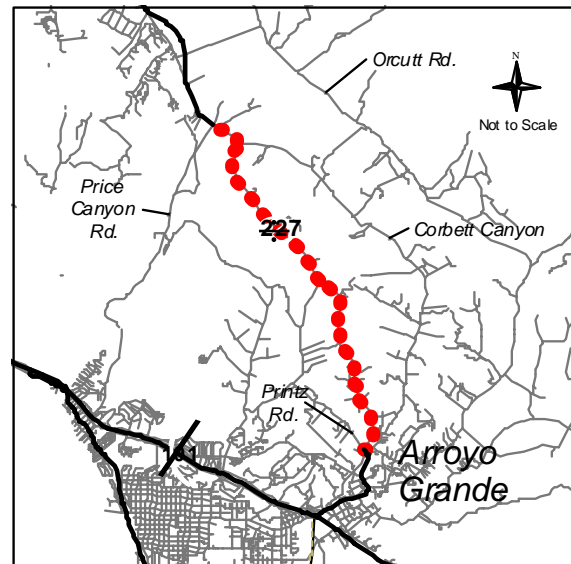
Functional Classification: Rural Minor Arterial
National Highway System: No
No. of Lanes: 2
R/W Width: 30 m (100') **Median Width:** 0'
Lane Width: 2.8 to 3.6 m (9–12') **Bike Lanes:** Class III
Shoulder Width: 1.2 – 2.5 m (4–8') **Parking:** No

Route Concept: 2-Lane Facility

Discussion: A two-lane facility, with improvements to alternate routes to alleviate congestion on this segment. Consider realigning segment to Price Canyon Road and relinquishing segment through the Village and between the Village and Price Canyon Road.

STATE ROUTE 227
SEGMENT #2

Post Mile: 1.49 to 7.13
Limits: Printz Rd. to Price Canyon

**Segment Features**

Parallel Facilities: Route 101, Corbett Canyon Road and Orcutt Road parallel this section of Route 227.

Environmental Constraints: Environmental constraints could preclude the widening of Segment #2 to four-lanes. The constraints include oak woodlands, the endangered Pismo Clarkia, and several stream crossings which support well developed wetlands.

Multimodal Facilities: The County Bike Plan prepared by the San Luis Obispo County Bicycle Advisory Committee and adopted by the local Board of Supervisors in October, 1998, proposes a continuous Class II bike lane from Corbett Canyon Road to the San Luis Obispo City Limit.

Land Use: Residential rural and residential suburban through the Arroyo Grande fringe area.

Major Traffic Generators: N/A

System Management: There is one traffic signal at Price Canyon Road on this section.

Identified Deficiencies – Existing and Future:

- Lack of capacity for future growth.
- Need for Class II Bike Lanes.
- Need shoulders for emergency use.
- Non-Standard Geometrics

Recommended Actions:

- Consider or implement Intelligent Transportation System (ITS) technologies identified in the Central Coast ITS Strategic Development Plan.
- Consult Long Range Operations Plan for ideas.
- Work with City of Arroyo Grande, SLOCOG and the County of SLO to determine appropriate alternate routes and improvements.
- Consult the study prepared for the City of Arroyo Grande for possible solutions.
- Explore relinquishment/"swap" for Price Canyon Road.
- Construct Class II Bike lanes.

ROUTE SEGMENT DATA

DISTRICT:	05	COUNTY:	SLO	ROUTE:	227
SEGMENT #:	2	P.M.:	1.49 to 7.13	LENGTH:	5.64

DESCRIPTION: Printz Road to Price Canyon

FUNCTIONAL CLASSIFICATION: Rural Minor Arterial

TYPE OF FACILITY: Conventional

TYPE OF TERRAIN: Rolling

NUMBER OF LANES: 2

LANE WIDTH: 9' to 12' **SHOULDER WIDTH:** 0' to 8'

R/W WIDTH: 100' **MEDIAN WIDTH:** 0'

ADT (PRESENT 1996): 2,000¹

ADT (FUTURE 2015): 3,200¹

PEAK HOUR VOLUME (Present): 326 (Present Design Hour)¹

DIRECTIONAL SPLIT: 55%

HOURS DELAY: Not Available

V/C RATIO: 0.06 **LOS:** C **% TRUCKS:** 9% of ADT

SIGNALIZED INTERSECTIONS: 1

3 YR. ACCIDENT RATE: 1.72² **FAT:** 0.057² **F&I:** 0.74²

STATEWIDE ACC. RATE: 1.53² **FAT:** 0.031² **F&I:** 0.80²

PROPOSED ROUTE CONCEPT (2015): 2 Lane Facility

ROUTE CONCEPT LOS (2015): C-45

ANTICIPATED LOS (2015): E without any improvements

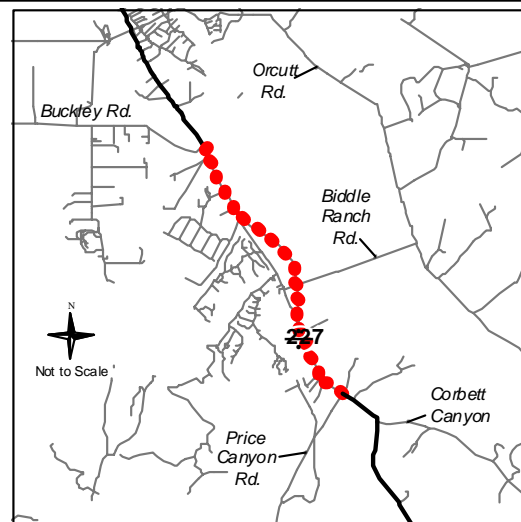
¹ Data from the 1996 Route Segment Inventory.

² Data calculated from 01-01-95 through 01-01-98

Type of Facility: Conventional Highway

Functional Classification: Rural Minor Arterial
National Highway System: No
No. of Lanes: 2
R/W Width: 30 m (100')
Lane Width: 3.6 m (12')
Shoulder Width: 2.4 m (8')

Median Width: 0'
Bike Lanes: Class III
Parking: No

State Route 227**Segment #3****Post Mile:** 7.13 to 9.82**Limits:** Price Canyon to Buckley Road**Route Concept: Four Lanes**

Discussion: The Route Concept for this segment is four-lanes. Environmental constraints must be addressed, including: one stream with well-developed wetlands, West Coral de Piedras, potential for associated endangered species (red legged frog), and cultural resources associated with the De Anza Trail and the townsite of Edna. Trinity Hall and the Edna Store are original to the townsite and may be eligible historic properties. These buildings are immediately adjacent to the existing roadway. An alternate route would be another way to increase capacity of this segment. However, no such route has been identified.

Segment Features

Parallel Facilities: Highway 101 and Orcutt Road parallel this segment.

Environmental Constraints: Constraints consist of farmland impacts and potential cultural resource impacts (the De Anza Trail), wetlands and one stream.

Multimodal Facilities: There is no Bus or Rail service between San Luis Obispo and Arroyo Grande along this section; The County Bike Plan prepared by the San Luis Obispo County Bicycle Advisory Committee and adopted by the local Board of Supervisors in October, 1998, proposes a continuous Class II bike lane from Corbett Canyon Road to the San Luis Obispo limit. This would require widening of the existing bridge to accommodate four lanes plus the Class II bike lane (A Class II bike lane is feasible within the current facility). SLOCOG has proposed a continuous Class II Bike lane on Rt. 227 from SLO City limits to Price Canyon Road continuing to Highway 101 in Pismo Beach.

Land Use: The Los Ranchos/Edna area is predominantly residential rural, residential suburban, agricultural and recreational land uses.

Major Traffic Generators: Local traffic from the adjacent residential and agricultural land uses; commute traffic to and from the South county via Price Canyon Road, or Route 227; and increased wine tasting facilities.

System Management: Traffic signals were installed at Price Canyon Road in August of 1994 and at Los Ranchos Road in 1997.

Identified Deficiencies – Existing and Future:

- Lack of capacity for future growth.
- Need for Class II Bike Lanes.

Recommended Actions:

- Consider or implement Intelligent Transportation System (ITS) technologies identified in the Central Coast ITS Strategic Development Plan.
- Review recommendations of the Long Range Operations Plan.
- Consult with SLOCOG and the County of SLO regarding potential improvements.
- Consider PSR to widen to 4 lanes with class II Bike lanes.

ROUTE SEGMENT DATA

DISTRICT:	05	COUNTY:	SLO	ROUTE:	227
SEGMENT #:	3	P.M.:	7.17 to R9.82	LENGTH:	2.69

DESCRIPTION: Price Canyon to Buckley Road

FUNCTIONAL CLASSIFICATION: Rural Minor Arterial

TYPE OF FACILITY: Conventional

TYPE OF TERRAIN: Rolling

NUMBER OF LANES: 2

LANE WIDTH: 12' **SHOULDER WIDTH:** 8'

R/W WIDTH: 100' **MEDIAN WIDTH:** 0'

ADT (PRESENT 1996): 8,400¹

ADT (FUTURE 2015): 14,300¹

PEAK HOUR VOLUME (Present): 1,369 (Present Design Hour)¹

DIRECTIONAL SPLIT: 55%

HOURS DELAY: Not Available

V/C RATIO: 0.12 **LOS:** E **% TRUCKS:** 9% of ADT

SIGNALIZED INTERSECTIONS: 1

3 YR. ACCIDENT RATE: 0.73² **FAT:** 0.035² **F&I:** 0.38²

STATEWIDE ACC. RATE: 1.35² **FAT:** 0.034² **F&I:** 0.72²

PROPOSED ROUTE CONCEPT (2015): 4 Lane Facility

ROUTE CONCEPT LOS (2015): C-45

ANTICIPATED LOS (2015): E without improvements

¹Data from the 1996 Route Segment Inventory.

²Data calculated from 01-01-95 through 01-01-98

Type of Facility: Conventional Highway

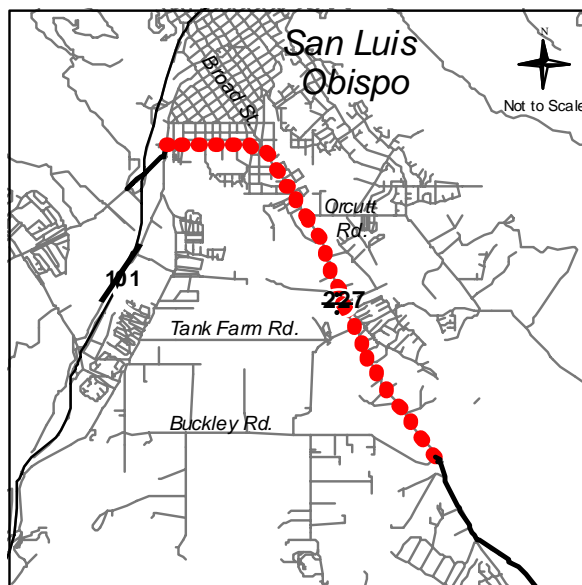
Functional Classification: Urban Other Principal Arterial
National Highway System: No
No. of Lanes: 2 & 4
R/W Width: 18 - 30 m (60-100') **Median Width:** 0'
Lane Width: 3.6 m (12') **Bike Lanes:** Class II
Shoulder Width: 1 - 2.4 m (3-8') **Parking:** Yes

Route Concept: Four Lanes

Discussion: For the portion of Segment 4 extending from Orcutt Road to Higuera Street we anticipate 'no change' from the current four-lane configuration. However, should the Prado Road extension be constructed and a new interchange is built at Route 101, traffic volumes north of the intersection should decrease. Caltrans District 5 would also relinquish the portion of Segment 4 beginning at Industrial Way (R 11.27), all of Segment 5 and adopt Prado Road as the new alignment.

The widening of Broad Street between Buckley Road and Orcutt Road would be considered only if the Prado Road extension and interchange are constructed, at which time, the resultant traffic distribution could be understood better. The widening would occur from Tank Farm Road to the new intersection of Prado Road and Route 227.

Since Route 227 is not an IRRS route, capacity increasing improvements are not a priority for State ITIP funds. The City and County could approach SLOCOG for RTIP funds, or identify another funding sources.

**State Route 227
Segment #4****Post Mile:** 9.82 to 13.74**Limits:** Buckley Road to Higuera Street**S e g m e n t F e a t u r e s**

Parallel Facilities: This segment is paralleled by Route 101 and Higuera Street.

Environmental Constraints: Constraints may include (but are not limited to) stream crossings, business and residential impacts and cultural resources.

Multimodal Facilities: The county Bike Plan prepared by the San Luis Obispo County Bicycle Advisory Committee and adopted by the local Board of Supervisors in October, 1998, proposes a continuous Class II bike lane from Corbett Canyon road to the San Luis Obispo City limit, and along Price Canyon Road. This is consistent with the City of SLO's Bicycle Transportation Plan (October 1993). SLO city is proposing to extend transit service to the airport in July, 1999.

Land Use: Existing land use from Buckley Road to Capitolio is primarily commercial/industrial. The proposed land use in the SLO Area Plan re-designates most of the industrial land use to commercial service which will result in a more intense employee per acre ratio. The Plan also proposes re-designating some of the residential single family to residential multiple family. Both of these actions will likely have a significant impact on Route 227. The land use is mostly commercial and residential from Capitolio to Higuera.

Major Traffic Generators: Major traffic generators in this area include the SLO county airport and the Marigold Center. Ever increasing development will require project mitigation to help address the traffic impacts to our infrastructure.

System Management: There are currently four signal systems in this section with no interconnect between the intersections.

Identified Deficiencies – Existing and Future:

- Lack of capacity for future growth.

Recommended Actions:

- Consider or implement Intelligent Transportation System (ITS) technologies identified in the Central Coast ITS Strategic Development Plan – (Interconnect signals).
- Work with SLOCOG and the City of SLO regarding potential improvements and funding.
- Consider PSR to widen to 4-lanes with Class II Bike lanes from Buckley Road to Tank Farm Road.

ROUTE SEGMENT DATA

DISTRICT:	05	COUNTY:	SLO	ROUTE:	227
SEGMENT #:	4A	P.M.:	R9.82 to R11.6	LENGTH:	1.8

DESCRIPTION: Buckley Road to Capitola Way

FUNCTIONAL CLASSIFICATION: Urban Other Principal Arterial

TYPE OF FACILITY: Conventional

TYPE OF TERRAIN: Rolling

NUMBER OF LANES: 2

LANE WIDTH: 12' **SHOULDER WIDTH:** 8'

R/W WIDTH: 100' **MEDIAN WIDTH:** 0' to 16'

ADT (PRESENT 1996): 12,100¹

ADT (FUTURE 2015): 17,100¹

PEAK HOUR VOLUME (Present): 1,742 (Present Design Hour)¹

DIRECTIONAL SPLIT: 55%

HOURS DELAY: Not Available

V/C RATIO: 0.20 **LOS:** B **% TRUCKS:** 5% of ADT

SIGNALIZED INTERSECTIONS: 3

3 YR. ACCIDENT RATE: 1.19² **FAT:** 0.000² **F&I:** 0.66²

STATEWIDE ACC. RATE: 2.16² **FAT:** 0.021² **F&I:** 0.99²

PROPOSED ROUTE CONCEPT (2015): 4-Lane Facility

ROUTE CONCEPT LOS (2015): B/C

ANTICIPATED LOS (2015): F without improvements

¹ Data from the 1996 Route Segment Inventory.

² Data calculated from 01-01-95 through 01-01-98

ROUTE SEGMENT DATA

DISTRICT:	05	COUNTY:	SLO	ROUTE:	227
SEGMENT #:	4B	P.M.:	R11.6 to R12.72	LENGTH:	1.3

DESCRIPTION: Capitola Way to South/Broad Street

FUNCTIONAL CLASSIFICATION: Urban Other Principal Arterial

TYPE OF FACILITY: Conventional

TYPE OF TERRAIN: Rolling

NUMBER OF LANES: 4

LANE WIDTH: 12' **SHOULDER WIDTH:** 4' - 8'

R/W WIDTH: 100' **MEDIAN WIDTH:** 16'

ADT (PRESENT 1996): 23,900¹

ADT (FUTURE 2015): 38,800¹

PEAK HOUR VOLUME (Present): 2,366 (Present Design Hour)¹

DIRECTIONAL SPLIT: 55%

HOURS DELAY: Not Available

V/C RATIO: 0.3/0.25³ **LOS:** B/B³ **% TRUCKS:** 3% of ADT

SIGNALIZED INTERSECTIONS: 3

3 YR. ACCIDENT RATE: 1.19² **FAT:** 0.000² **F&I:** 0.66²

STATEWIDE ACC. RATE: 2.16² **FAT:** 0.021² **F&I:** 0.99²

PROPOSED ROUTE CONCEPT (2015): 4-Lane Facility.

ROUTE CONCEPT LOS (2015): B/C

ANTICIPATED LOS (2015): F without improvements

¹ Data from the 1996 Route Segment Inventory.

² Data calculated from 01-01-95 through 01-01-98.

³ V/C ratio and LOS are listed as peak direction /off peak direction.

Type of Facility: Conventional Highway

Functional Classification:	Urban	Other	Principal Arterial
National Highway System:	No		
No. of Lanes:	4		
R/W Width:	19 m (60')	Median Width:	0'
Lane Width:	3.6 m (12')	Bike Lanes:	Class II
Shoulder Width:	1m (3')	Parking:	No

Route Concept: Prado Road Realignment

Discussion: In spite of continued deterioration of the level of service in this segment, no change of the current configuration is suggested, unless the Prado Road Interchange is constructed.

Re-designation of Route 227 to Prado Road following the construction of the Prado Road Interchange with Route 101 and the widening and extension of Prado Road to Broad Street.

**State Route 227
Segment #5****Post Mile:** R13.74 to R14.19**Limits:** Higuera Street to Jct. Rte. 101/227**S e g m e n t F e a t u r e s****Parallel Facilities:** None.**Environmental Constraints:** None.

Multimodal Facilities: SLO City Transit serves Route 227 within the city limits. Service is available in hourly headways as far as Tank Farm Road. The City of SLO has identified Route 227 as a continuous Class II bicycle facility.

Land Use: This segment is commercial/public facilities.

Major Traffic Generators: Primary access to the community of Los Osos, major link between shopping area, Laguna Lake area and access to Los Osos Valley Road. Other routes are too indirect.

System Management: There are currently four signalized intersections in this segment. Two systems are coordinated during portions of the day.

Identified Deficiencies – Existing and Future:

- LOS in this segment of Route 227 is in the area of B/B. However, the Madonna Road/South Street/Higuera Street signals operate at a LOS of D to F during peak hours.
- Lack of contiguous sidewalk system.

Recommended Actions:

- Consider or implement Intelligent Transportation System (ITS) technologies identified in the Central Coast ITS Strategic Development Plan.
- Operational improvements as needed. Including a contiguous sidewalk system.
- Consult Long Range Operations Plan
- Work with SLOCOG and the City of San Luis Obispo on potential improvements.

ROUTE SEGMENT DATA

DISTRICT:	05	COUNTY:	SLO	ROUTE:	227
SEGMENT #:	5	P.M.:	R12.72 to R14.1	LENGTH:	1.1

DESCRIPTION: South/Broad Street to Jct. Rte. 101/227

FUNCTIONAL CLASSIFICATION: Urban Other Principal Arterial

TYPE OF FACILITY: Conventional

TYPE OF TERRAIN: Flat

NUMBER OF LANES: 4

LANE WIDTH: 12' **SHOULDER WIDTH:** 4'

R/W WIDTH: 60' **MEDIAN WIDTH:** 0''

ADT (PRESENT 1996): 26,800¹

ADT (FUTURE 2015): 26,000¹

PEAK HOUR VOLUME (Present): 3,216 (Present Design Hour)¹

DIRECTIONAL SPLIT: 55%

HOURS DELAY: Not Available

V/C RATIO: 0.43/0.35³ **LOS:** B/B³ **% TRUCKS:** 3% of ADT

SIGNALIZED INTERSECTIONS: 1

3 YR. ACCIDENT RATE: 0.88² **FAT:** 0.033² **F&I:** 0.72²

STATEWIDE ACC. RATE: 4.41² **FAT:** 0.020² **F&I:** 1.80²

PROPOSED ROUTE CONCEPT (2015): No significant change.

ROUTE CONCEPT LOS (2015): D-35

ANTICIPATED LOS (2015): D-35

¹ Data from the 1996 Route Segment Inventory.

² Data calculated from 01-01-95 through 01-01-98

³ V/C ratio and LOS are listed as peak direction /off peak direction.

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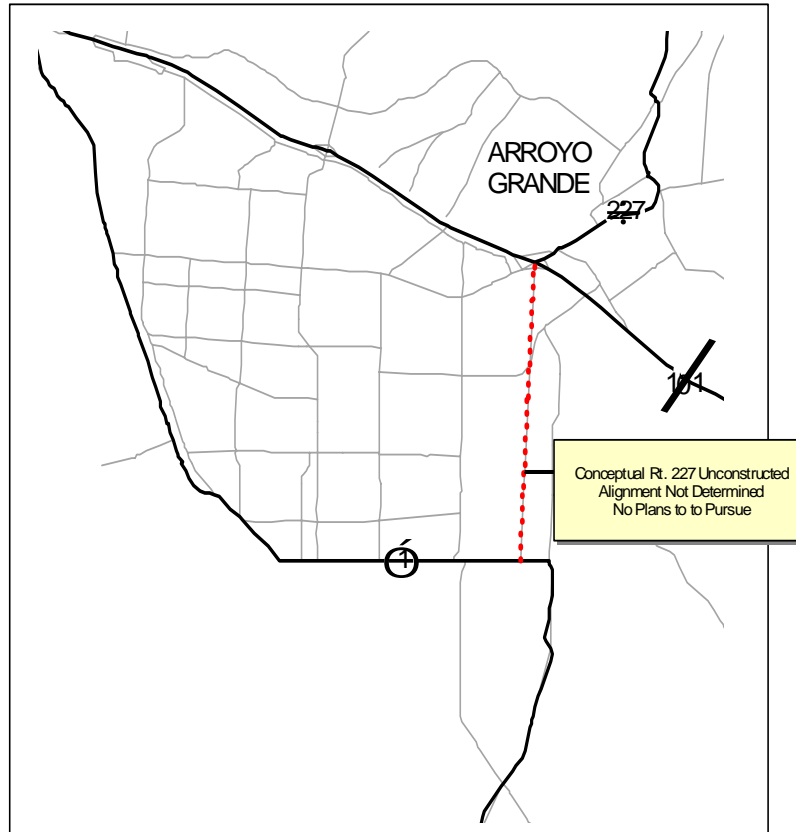
ATTACHMENT A

LEVEL OF SERVICE (LOS)	MIN. OPERATING SPEED	DESCRIPTION
B	55 MPH	Freeways, expressways, or rural multilane highways with access control
	50 MPH	two-lane facilities
C	50 MPH	Rural or urban freeways or expressways
	45 MPH	Rural multilane highways without access control
	45 MPH	Two-lane rural roads
	40 MPH	Two-lane rural roads
D	40 MPH	Urban freeways or expressways
	35 MPH	Rural multilane highways without access control
	35 MPH	Rural or urban two-lane facilities.

NOTE: New methodology does not use this form of classification. These levels were ascertained by determining the appropriate minimum operating speed consistent with the level of service assigned to the particular facility type. In new versions of the RCR, minimum operating speed will not be used.

ATTACHMENT B

Route 227 Unconstructed Concept



1000 0 1000 Meters

A scale bar with markings for 1000, 0, and 1000 meters.